

IN THE SPECIFICATION:

At page 4, line 29, through page 5, line 5, please replace the text with the following paragraphs:

Figure 3 depicts the results of a search which was performed against the HMM database and which resulted in the identification of an “acyltransferase domain” in the human ACTR-1 protein (SEQ ID NO:2). Amino acid residues 215-412 of ACTR-1 (SEQ ID NO:2) are aligned with the HMM acyltransferase domain (SEQ ID NO:3).

Figure 4A-G depicts the results of a search which was performed against the ProDom database and which resulted in the local alignment of the human ACTR-1 protein with acyltransferase proteins. Amino acid residues of ACTR-1 (SEQ ID NO:2) (Query) are aligned with acyltransferase proteins: PD042760 acyltransferase phospholipid biosynthesis precursor transmembrane glycerol-3 phosphate GPAT mitochondrion mitochondrial (SEQ ID NO:5), PD353751 acyltransferase phospholipid biosynthesis precursor transmembrane glycerol-3-phosphate GPAT mitochondrion mitochondrial (SEQ ID NO:6), PD025192 acyltransferase phospholipid mitochondrial biosynthesis precursor transmembrane glycerol-3-phosphate GPAT mitochondrion (SEQ ID NO:7), PD042466 acyltransferase glycerol-3-phosphate biosynthesis phospholipid GPAT precursor mitochondrial transmembrane mitochondrion (SEQ ID NO:8 and SEQ ID NO:9), PD037846 acyltransferase glycerol-3-phosphate phospholipid GPAT biosynthesis mitochondrial transmembrane precursor mitochondrion (SEQ ID NO:10), PD347660 acyltransferase phospholipid biosynthesis precursor transmembrane glycerol-3-phosphate GPAT mitochondrion mitochondrial (SEQ ID NO:11), PD042027 acyltransferase glycerol-3-phosphate membrane phospholipid GPAT biosynthesis mutant (SEQ ID NO:12 and SEQ ID NO:13), and PD087501 AIP2-DLD1 (SEQ ID NO:14).

Figure 5A-C depicts a multiple sequence alignment of the amino acid sequence human ACTR-1 protein (SEQ ID NO:2) with the amino acid sequences of mouse and rat glycerol-3-phosphate acyltransferase (~~GenBank~~ GENBANK[™] Accession Nos. AAA37647 and AAB71605, set forth as SEQ ID NO:4015 and SEQ ID NO:4416, accordingly.) The alignment was generated using the Clustal algorithm which is part of the ~~MegaAlign~~ MEGALIGN[™] software package. The multiple alignment parameters are as follows: Gap Penalty = 10; Gap Length Penalty = 10. The pairwise alignment parameters are as follows: K-tuple = 1; Gap Penalty = 3; Window = 5; Diagonals Saved = 5; Weight Residue Table = PAM250.

Figure 6 depicts an alignment of the amino acid residues of various acetyltransferase catalytic and/or signature motifs (catalytic motif-I of 56919, MouseGPAT, RatGPAT (SEQ ID NO:17) and EcoliGPAT (SEQ ID NO:18); catalytic motif-II of 56919, MouseGPAT, RatGPAT (SEQ ID NO:19) and EcoliGPAT (SEQ ID NO:20); catalytic motif-III 56919 (SEQ ID NO:21) and MouseGPAT, RatGPAT (SEQ ID NO:22) and EcoliGPAT (SEQ ID NO:23); and signature motif of 56919, MouseGPAT, RatGPAT (SEQ ID NO:24) and EcoliGPAT (SEQ ID NO:25).

At page 5, lines 7-16, please replace the paragraphs with the following text:

Figure 7 is a graph depicting the relative expression of ACTR-1 in various human tissues as determined by a ~~TaqMan~~TAQMAN® Quantitative Polymerase Chain Reaction analysis.

Figure 8 is a graph depicting the relative expression of ACTR-1 in various human tissues as determined by a ~~TaqMan~~TAQMAN® Quantitative Polymerase Chain Reaction analysis.

Figure 9 is a graph depicting the relative expression of ACTR-1 various liver, heart and adipose tissues as determined by a ~~TaqMan~~TAQMAN® Quantitative Polymerase Chain Reaction analysis.

At page 33, line 19, through page 34, line 3, please replace the paragraph with the following text:

Alternative to preparing monoclonal antibody-secreting hybridomas, a monoclonal anti-ACTR-1 antibody can be identified and isolated by screening a recombinant combinatorial immunoglobulin library (e.g., an antibody phage display library) with ACTR-1 to thereby isolate immunoglobulin library members that bind ACTR-1. Kits for generating and screening phage display libraries are commercially available (e.g., the Pharmacia *Recombinant Phage Antibody System*, Catalog No. 27-9400-01; and the Stratagene ~~SurfZAP~~SURFZAP™ *Phage Display Kit*, Catalog No. 240612). Additionally, examples of methods and reagents particularly amenable for use in generating and screening antibody display library can be found in, for example, Ladner *et al.* U.S. Patent No. 5,223,409; Kang *et al.* PCT International Publication No. WO 92/18619; Dower *et al.* PCT International Publication No. WO 91/17271; Winter *et al.* PCT International Publication WO 92/20791; Markland *et al.* PCT International Publication No. WO 92/15679; Breitling *et al.* PCT International Publication WO 93/01288; McCafferty *et al.* PCT International Publication No. WO 92/01047; Garrard *et al.* PCT International Publication No. WO 92/09690; Ladner *et al.* PCT International Publication No. WO 90/02809; Fuchs *et al.* (1991) *Bio/Technology* 9:1370-1372; Hay *et al.* (1992) *Hum. Antibod. Hybridomas* 3:81-85; Huse *et al.* (1989) *Science* 246:1275-1281; Griffiths *et al.* (1993) *EMBO J.* 12:725-734; Hawkins *et al.* (1992) *J. Mol. Biol.* 226:889-896; Clarkson *et al.* (1991) *Nature* 352:624-628; Gram *et al.* (1992) *Proc. Natl. Acad. Sci. USA* 89:3576-3580; Garrard *et al.* (1991) *Bio/Technology* 9:1373-1377; Hoogenboom *et al.* (1991) *Nuc. Acid Res.* 19:4133-4137; Barbas *et al.* (1991) *Proc. Natl. Acad. Sci. USA* 88:7978-7982; and McCafferty *et al.* (1990) *Nature* 348:552-554.

At page 43, line 35 through page 44, line 16, please replace the paragraph with the following text:

Pharmaceutical compositions suitable for injectable use include sterile aqueous solutions (where water soluble) or dispersions and sterile powders for the extemporaneous preparation of

sterile injectable solutions or dispersion. For intravenous administration, suitable carriers include physiological saline, bacteriostatic water, ~~Cremophor~~ CREMOPHOR EL™ (BASF, Parsippany, NJ) or phosphate buffered saline (PBS). In all cases, the composition must be sterile and should be fluid to the extent that easy syringability exists. It must be stable under the conditions of manufacture and storage and must be preserved against the contaminating action of microorganisms such as bacteria and fungi. The carrier can be a solvent or dispersion medium containing, for example, water, ethanol, polyol (for example, glycerol, propylene glycol, and liquid polyethylene glycol, and the like), and suitable mixtures thereof. The proper fluidity can be maintained, for example, by the use of a coating such as lecithin, by the maintenance of the required particle size in the case of dispersion and by the use of surfactants. Prevention of the action of microorganisms can be achieved by various antibacterial and antifungal agents, for example, parabens, chlorobutanol, phenol, ascorbic acid, thimerosal, and the like. In many cases, it will be preferable to include isotonic agents, for example, sugars, polyalcohols such as manitol, sorbitol, sodium chloride in the composition. Prolonged absorption of the injectable compositions can be brought about by including in the composition an agent which delays absorption, for example, aluminum monostearate and gelatin.

At page 54, line 29, through page 55, line 2, please replace the paragraph with the following text:

The cell-free assays of the present invention are amenable to use of both soluble and/or membrane-bound forms of isolated proteins (*e.g.*, ACTR-1 proteins or biologically active portions thereof). In the case of cell-free assays in which a membrane-bound form of an isolated protein is used it may be desirable to utilize a solubilizing agent such that the membrane-bound form of the isolated protein is maintained in solution. Examples of such solubilizing agents include non-ionic detergents such as n-octylglucoside, n-dodecylglucoside, n-dodecylmaltoside, octanoyl-N-methylglucamide, decanoyl-N-methylglucamide, ~~Triton~~TRITON® X-100, ~~Triton~~TRITON® X-114, ~~Thesit~~THESIT®, Isotridecypoly(ethylene glycol ether)_n, 3-[(3-cholamidopropyl)dimethylamminio]-1-propane sulfonate (CHAPS), 3-[(3-cholamidopropyl)dimethylamminio]-2-hydroxy-1-propane sulfonate (CHAPSO), or N-dodecyl=N,N-dimethyl-3-ammonio-1-propane sulfonate.

At page 85, line 11 through page 86, line 7, please replace the text with the following:

This example describes the tissue distribution of human ACTR-1 mRNA in a variety of cells and tissues, as determined using the ~~TaqMan~~TAQMAN™ procedure. The ~~Taqman~~TAQMAN™ procedure is a quantitative, reverse transcription PCR-based approach for detecting mRNA. The RT-PCR reaction exploits the 5' nuclease activity of ~~AmpliTaq Gold~~AMPLITAQ GOLD™ DNA Polymerase to cleave a ~~TaqMan~~TAQMAN™ probe during PCR. Briefly, cDNA was generated from the samples of interest, *e.g.*, various human tissue samples,

and used as the starting material for PCR amplification. In addition to the 5' and 3' gene-specific primers, a gene-specific oligonucleotide probe (complementary to the region being amplified) was included in the reaction (*i.e.*, the ~~Taqman~~TAQMAN™ probe). The ~~Taqman~~TAQMAN™ probe includes the oligonucleotide with a fluorescent reporter dye covalently linked to the 5' end of the probe (such as FAM (6-carboxyfluorescein), TET (6-carboxy-4,7,2',7'-tetrachlorofluorescein), JOE (6-carboxy-4,5-dichloro-2,7-dimethoxyfluorescein), or VIC) and a quencher dye (TAMRA (6-carboxy-N,N,N',N'-tetramethylrhodamine) at the 3' end of the probe.

During the PCR reaction, cleavage of the probe separates the reporter dye and the quencher dye, resulting in increased fluorescence of the reporter. Accumulation of PCR products is detected directly by monitoring the increase in fluorescence of the reporter dye. When the probe is intact, the proximity of the reporter dye to the quencher dye results in suppression of the reporter fluorescence. During PCR, if the target of interest is present, the probe specifically anneals between the forward and reverse primer sites. The 5'-3' nucleolytic activity of the ~~AmpliTaq™ Gold~~AMPLITAQ GOLD™ DNA Polymerase cleaves the probe between the reporter and the quencher only if the probe hybridizes to the target. The probe fragments are then displaced from the target, and polymerization of the strand continues. The 3' end of the probe is blocked to prevent extension of the probe during PCR. This process occurs in every cycle and does not interfere with the exponential accumulation of product. RNA was prepared using the trizol method and treated with DNase to remove contaminating genomic DNA. cDNA was synthesized using standard techniques. Mock cDNA synthesis in the absence of reverse transcriptase resulted in samples with no detectable PCR amplification of the control gene confirms efficient removal of genomic DNA contamination.